UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,076	08/19/2003	Toshiharu Ishida	116692004100	3052

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>30 July 2008</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-15</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-15</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 30,

2008 has been entered.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   **Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over**

Kawashima et al. (#5,168,445) and further in view of Tone et al. (#5,596,493)

        As per claims 1, 6 and 11 Kawashima et al. discloses a computer readable

medium storing instructions for performing an inventory management

method/apparatus/recording medium that calculates a supplement

amount of inventory at a specific day (Column 1, lines 7-10 discusses the invention

relates to a system of ordering goods at a retail shop and more particularly to an

automatic ordering system suitable for ordering work and inventory control of goods

distributed daily, See also Figure 1), the method comprises:

a step for calculating a first sales plan amount (See Figure 1, Sales Volume

Predictor 3 and 11) from a standard day prior to said specific day based on sales

performance data (See Figure 1, POS Data 11) that stores the sales performance, and

sales plan data that stores the sales plan (Column 7, lines 47-48 discloses a step for

predicting or calculating a volume of sales for a period of time, where the Examiner is

construing as calculating a sales plan);

a step for predicting a first inventory amount (See Figure 1, Ordering Amount

Calculator 4) at said specific day based on said first sales plan amount (See Figure 1,

Predictive Data 12), a second inventory amount (See Figure 1, Stock Data 13) at said

standard day (Column 7, lines 48-52 discuss a condition diagnostic unit may calculate

the amount of change of selling on the basis of the past contents of the POS data to

automatically correct safety stock volume of the stock data) and warehousing amount

from said standard day to said specific day (Column 7, lines 38-40 discusses a stock

control system for controlling the stock volume by using bar-codes and the like via the

stock data, where a person having ordinary skill in the art can apply bar code data to

determine warehousing amount).

a step for predicting a second sales plan amount of the period from said specific

day to through a number of following days required to deliver a merchandise, based on

said first sales plan amount (Column 7, lines 64-68 discusses wherein ordering is done

every day and delivery is received two days after an order date, a fixed period ordering

mode may be adopted wherein ordering is done not every day but at an interval of a few

days, the Examiner is construing that ordering merchandise to replace sold

merchandise everyday is a form of predicting sales amount), but fails to explicitly

disclose a step for calculating a sales fluctuation range amount by multiplying said

second sales plan amount by a predetermined fluctuation range ratio, wherein the

fluctuation range ratio is a pre- calculated value representing fluctuation of a past

performance amount relative to a corresponding expected amount.

a step for calculating a lower limit inventory amount of said specific day as a sum

of based on said second sales plan amount and a standard value of ordinary inventory,

wherein the standard value of ordinary inventory is based on said sales fluctuation

range amount; and

a step for calculating a supplement amount based on as a difference between

the lower limit inventory amount of said specific day and said first inventory amount and

said lower limit inventory amount of said specific day

Both Kawashima and Tone et al. are in the same field of inventory management

systems, Tone et al. teaches a method of <u>calculating a sales fluctuation range amount</u>

<u>by multiplying said sales amount by a predetermined fluctuation range ratio, wherein the</u>

<u>fluctuation range ratio is a pre- calculated value representing fluctuation of a past</u>

<u>performance amount relative to a corresponding expected amount</u> (Col.18, lines 19-24

for causal type goods, the standard deviation of the residuals of the estimation formula,

or standard error, is used as a concrete method for correlation. In case of a larger

variance of the sale amounts, the sale amounts are divided into several domains

according to the size of the sales and the standard deviation of the residuals or the

standard error belonging to each domain is employed. In this case, the standard

deviation or the standard error tends to be changed in proportion to the sale amounts.

and Col.18, lines 3-9, the safety stock α is correlated with the variance of the sold

quantity, a measure of the safety stock α is correlated with the variance of the past sale

amount), Tone et al. further teaches a step for <u>calculating a lower limit inventory amount</u>

<u>of said specific day as a sum of second sales plan amount and a standard value of</u>

<u>ordinary inventory, wherein the standard value of ordinary inventory is based on said</u>

<u>sales fluctuation range amount</u> (Col.17, lines 49-51 the variables required in the present

restocking ordering system are an estimated sale for tomorrow Y, quantity of goods to

be carried over to the next day U and a safety stock α, where by $P=\max[(Y-U)+ \alpha, 0]$),

and <u>a step for calculating a supplement amount based on as a difference between the</u>

<u>lower limit inventory amount of said specific day and said first inventory amount</u> (Col.17,

lines 27-32 residual amount at the close of the store hours is Z and, of these Z goods, D

goods are to be scrapped because of expiration of the available period. The quantity U

of the goods to be carried over to the next day is expressed by $U=Z-D$).

Therefore, it would have been obvious to one of ordinary skill in the art to modify

the inventory management system of Kawashima et al., to include the ability to calculate

a standard deviation or standard error of sales amounts, a residual inventory amount,

and restocking inventory amount as taught by Tone et al. in order to calculate basic

statistic values of daily sale amounts of the individual goods based on the sale amount

data of the individual goods, and classifying the data of the basic statistic data into one

of plural class types (Col.2, lines 65—67).

As per claims 2, 7, and 12, Kawashima et al. discloses the computer readable

medium/apparatus/recording medium wherein said step for calculating the first sales

plan amount comprises:

a step for calculating a sales performance ratio of each operating day based on

said sales performance data (Column 4, lines 20-25 discuss a sales volumes which

occurred previously on certain days, each being the same day of the week ex.

Thursday, as that of the day for which the sales volume is predicted, i.e., the 28-th day,

is averaged in respect of each item of goods);

a step for calculating an expected sales performance ratio of each operating day

after the standard day (Column 4, lines 12-20 discuss a prediction is based on the

assumption that the date the date named is the 26-th day of the month and goods

ordered on the 26-th day are scheduled to be delivered two days later i.e., on the 28-th

day, thereby predicting on the named 26-th day the volume of sales expected to occur

on the 28-th day) based on said sales performance ratio of each operating day; and

a step for calculating a sales plan amount until said specific day based on said

expected sales performance ratio of each operating day after the standard day (Column

4, lines 14-19, refers to FIG. 5, sales volumes, generally indicated by 503, which

previously occurred on certain days, each being the same day of the week, are

averaged in respect of an item of B chocolate. For example, the thus averaged

predictive value is assumed to be "200").

As per claims 3, 8, and 13, Kawashima et al. discloses the computer readable

medium /apparatus/recording medium, wherein said warehousing amount

is calculated based on said supplement amount of said standard day to the day before

the specific day (Column 2, lines 41-46 discuss a method necessary to forecast or

predict the volume of sales occurring before the delivery lead time and determine the

amount of orders or ordered goods, by taking into account the volume of inventories at

an ordering time point and the safe total stock which is set to prevent out-of-stock).

As per claims 4, 9 and 14, Kawashima et al. discloses the computer readable

medium /apparatus/recording medium, wherein said specific day is a day

after the soonest day possible to supplement the inventory, when there is a new order

(Column 2, lines 56-57 discuss a method that the ordering work is performed once

every day in accordance with a daily ordering schedule and that ordered goods are

delivered two days after an ordering day the day after tomorrow).

As per claims 5, 10 and 15, Kawashima et al. discloses the computer readable

medium/apparatus/recording medium wherein said computer further

comprises a step for respectively calculating a retrospective day that goes back a period

(Column 7, lines 48-52 discuss a method wherein the condition diagnostic unit may

calculate the amount of change of selling on the basis of the past contents of the POS

data to automatically correct safety stock volume of the stock data) which is required to

deliver the merchandise from the factory, before a delivery day of each of one or more

blanket orders, (Column 7, line 68 discuss a method where a fixed quantity ordering

mode may be adopted wherein the order amount is fixed, a blanket order is construed

as a fixed quantity) and said step for calculating said lower limit inventory amount,

(Column 8, lines 28-30 discuss where a selling status and stock status can

automatically be diagnosed in respect of individual goods groups and individual goods, the Examiner is construing that the process of automatically diagnosing the selling and stock status, a person having ordinary skill in the art can derive a lower limit inventory amount) includes calculating with said sales fluctuation range and said second sales plan amount the lower limit inventory amount at said specific day (Column 8, lines 22-24 discuss the amount of change of selling of individual goods can automatically be reflected on the order amount), based on each order amount and said retrospective day of said one or more blanket orders (Column 8, lines 1-4 discuss a mode wherein the lead time is different for individual items of goods or individual seasons, where the lead time is construed as the retrospective day).

Response to Arguments

4.   Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kakouros et al. (#7,249,068) discusses spot market-based inventory planning.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashford S. Hayles whose telephone number is 571-270-5106. The examiner can normally be reached on Monday thru Thursday 8:30 to 4:00 Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Matthew Gart can be reached on (571) 272-3955. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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